

IN THE CLAIMS

Please amend the claims as follows:

Claims 1-12 (Canceled).

Claim ~~13~~ (New): An irradiation device for a target, by a charged hadron beam, produced by means for generating a charged hadron beam, the device comprising: corpuscular optics means for making transverse density of the charged hadron beam uniform, along at least one direction perpendicular to a trajectory of the charged hadron beam; and means for three-dimensional control of irradiation of the target by the charged hadron beam, wherein the three dimensional control means includes: means for adjusting energy of generated charged hadrons, and scanning means for displacing the charged hadron beam to make it scan the target along a narrow substantially rectangular band, and for causing the center of the narrow band to follow a median line while lengthening or shortening the narrow band to follow contours of the target.

Claim ~~14~~ (New): A device according to claim 13, wherein the corpuscular optics means comprises at least one non-linear corpuscular optics lens.

Claim ~~15~~³ (New): A device according to claim 13, wherein the corpuscular optics means includes two non-linear corpuscular optics lenses configured to make the transverse density of the charged hadron beam uniform, along two directions perpendicular to each other and to the trajectory of the charged hadron beam.

~~14~~ Claim ~~16~~ (New): A device according to claim 14, wherein each non-linear

corpuscular optics lens is $2n$ -polar, where $2n$ is an integer equal to at least 8.

~~15~~ Claim ~~17~~ (New): A device according to claim 13, wherein the scanning means

includes a pair of magnetic dipoles.

~~16~~ Claim ~~18~~ (New): A device according to claim 13, wherein the charged hadron beam

generation means comprises a synchrotron and the means for adjusting the energy of the

generated charged hadrons are means of adjusting the energy of the charged hadrons

produced by the synchrotron.

~~17~~ Claim ~~19~~ (New): A device according to claim 13, wherein the means for generation

of the charged hadron beam comprises a cyclotron and the means for adjusting the energy of

the generated charged hadrons includes moment analysis means.

~~18~~ Claim ~~20~~ (New): A device according to claim 13, wherein the corpuscular optics

means are capable of varying uniformization of transverse density of the charged hadron

beam depending on a length and/or a width of the narrow band.

~~19~~ Claim ~~21~~ (New): A device according to claim 12, wherein the scanning means is

capable of making the charged hadron beam scan the target at predetermined depths of the

target, a plurality of times for each of the depths, a dose delivered to the target each time

being equal to a total dose required for the depth, divided by the number of times.

~~22~~²⁰
Claim ~~22~~²⁰ (New): A device according to claim 13, wherein the charged hadrons are light nuclei.

~~23~~²¹
Claim ~~23~~²¹ (New): A device according to claim 15, wherein each non-linear corpuscular optics lens is 2n-polar, where 2n is an integer equal to at least 8.